CLAIMS

1. A laminate, comprising: a polymer substrate; a primer layer comprising a cyclized rubber which is a conjugated diene polymer cyclized product or a derivative thereof, the layer being formed on the surface of the polymer substrate; and a thin film laminated on the surface of the primer layer by a dry film-forming method.

2. The laminate according to claim 1, wherein the weight-average molecular weight of the cyclized rubber is from 1,000 to 1,000,000.

3. The laminate according to claim 1 or 2, wherein the cyclization ratio of the cyclized rubber is 10% or more.

4. The laminate according to any one of claims 1 to 3, wherein the amount of gel in the cyclized rubber is 10% or less by weight.

5. The laminate according to any one of claims 1 to 4, wherein the content of the cyclized rubber in the primer layer is 10% or more by weight.

6. The laminate according to any one of claims 1 to 5, wherein the derivative of the conjugated diene polymer cyclized product is a compound produced by introducing a polar group into the conjugated diene polymer cyclized product by a modifying reaction using a polar-group-containing compound.

7. The laminate according to claim 6, wherein the polar group is at least one group selected from the group consisting of an acid anhydride group, a carboxyl group, a hydroxyl group, an ester group, an epoxy group, and an amino group.

8. The laminate according to claim 6 or 7, wherein the ratio of the introduced polar group is from 0.1 to 200 millimoles per 100 g of the cyclized rubber.

9. The laminate according to any one of claims 1 to 8, wherein the film thickness of the primer layer is from 0.1 to 200 μm.

10. The laminate according to any one of claims 1 to 9, wherein the polymer which constitutes the polymer substrate is a hydrocarbon resin.

11. The laminate according to any one of claims 1 to 10, wherein the film thickness of the thin film is from 1 nm to 100 μm.

12. The laminate according to any one of claims 1 to 11, wherein the thin film is an amorphous carbon film.

13. A process for producing a laminate, comprising the steps of applying, to a surface of a polymer substrate, a primer comprising a cyclized rubber which is a conjugated diene polymer cyclized product or a derivative thereof to form a primer layer on the surface of the polymer substrate, and then laminating

a thin film on the surface of the primer layer by a dry film-forming process.

14. A laminate, comprising: a polymer substrate in which a cyclized rubber which is a conjugated diene polymer cyclized product or a derivative thereof is incorporated into a polymer-molding material; and a thin film laminated on the surface of the polymer substrate by a dry film-forming process.

15. The laminate according to claim 14, wherein the weight-average molecular weight of the cyclized rubber is from 1,000 to 1,000,000.

16. The laminate according to claim 14 or 15, wherein the cyclization ratio of the cyclized rubber is 10% or more.

17. The laminate according to any one of claims 14 to 16, wherein the amount of gel in the cyclized rubber is 10% or less by weight.

18. The laminate according to any one of claims 14 to 17, wherein the derivative of the conjugated diene polymer cyclized product is a compound produced by introducing a polar group into the conjugated diene polymer cyclized product by a modifying reaction using a polar-group-containing compound.

19. The laminate according to claim 18, wherein the polar group is at least one group selected from the group consisting of an

acid anhydride group, a carboxyl group, a hydroxyl group, an ester group, an epoxy group, and an amino group.

20. The laminate according to claim 18 or 19, wherein the ratio of the introduced polar group is from 0.1 to 200 millimoles per 100 g of the cyclized rubber.

21. The laminate according to any one of claims 14 to 20, wherein the incorporated amount of the cyclized rubber is from 0.1 to 50 parts by weight for 100 parts by weight of the polymer-molding material.

22. The laminate according to any one of claims 14 to 21, wherein the polymer which constitutes the polymer-molding material is a hydrocarbon resin.

23. The laminate according to any one of claims 14 to 22, wherein the film thickness of the thin film is from 1 nm to 100 μm.

24. The laminate according to any one of claims 14 to 23, wherein the thin film is an amorphous carbon film.

25. A process for producing a laminate, comprising the step of laminating a thin film, on a surface of a polymer substrate produced by incorporating a conjugated diene polymer cyclized product or a derivative thereof into a polymer-molding material, by a dry film-forming method.